Supplement 1

Estimation of the outbreak size.

Not all new HIV diagnoses were sequenced. The size estimation is based on the coverage rates (proportion of sequenced newly diagnosed HIV cases) from Munich and from remaining regions of Bavaria. The proportion of sequenced cases was different for transmission groups and whether it was submitted from Munich or from Bavaria outside of Munich. Total cases were calculated based on the specific coverage rate. The sum of all total cases represents the estimated outbreak size (28.5+3.4+6.8+2.1+3+4.2=48).

Munich													
Year	PWID							MSM						
	reports	sequenced	coverage rate	known cases	total cases	95%CI low	95% CI high	reports	sequenced	coverage rate	known cases	total cases	95% CI low	95% CI high
2015	6	4	0.67	2	3.0	1	5	91	20	0.22	0	0.0	0	0
2016	27	18	0.67	15	22.5	19	26	119	35	0.29	1	3.4	0	7
2017	3	2	0.67	2	3.0	3	3	104	59	0.57	0	0.0	0	0
2018	6	1	0.17	0	0.0	0	0	80	45	0.56	0	0.0	0	0
Cumulative	42	25	0.60	**19**	**28.5**	23	34	394	159	0.40	**1**	**3.4**	0	7

	HET							not reported						
Year	reports	sequenced	coverage rate	known cases	total cases	95% CI low	95% CI high	reports	sequenced	coverage rate	known cases	total cases	95% CI low	95% CI high
2015	89	35	0.39	0	0.0	0	0	34	9	0.26	0	0.0	0	0
2016	81	19	0.23	1	4.3	0	8	19	9	0.47	1	2.1	0	5
2017	52	22	0.42	0	0.0	0	0	26	11	0.42	0	0.0	0	0
2018	50	20	0.40	1	2.5	0	6	17	5	0.29	0	0.0	0	0
Cumulative	272	96	0.35	**2**	**6.8**	2	12	96	34	0.35	**1**	**2.1**	0	5

Bavaria without Munich													
Year	PWID							not reported						
	reports	sequenced	coverage rate	known cases	total cases	95% CI low	95% CI high	reports	sequenced	coverage rate	known cases	total cases	95% CI low	95% CI high
2015	15	4	0.27	0	0.0	0	0	71	21	0.30	0	0.0	0	0
2016	19	12	0.63	1	1.6	0	4	59	14	0.24	1	4.2	0	8
2017	16	11	0.69	1	1.5	0	4	66	35	0.53	0	0.0	0	0
2018	13	4	0.31	0	0.0	0	0	61	24	0.39	0	0.0	0	0
Cumulative	63	31	0.49	**2**	**3.0**	0	6	257	94	0.37	**1**	**4.2**	0	8

		95% CI low	95% CI high
number of reports	1124		
number of known cases*	**26**		
number of putative outbreak cases	**48**	**35**	**61**

* In total sequences of 27 outbreak cases are known. One outbreak case diagnosed in 2015 was identified in the HIV-1 Serovonverter kohort.